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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,345	12/20/2001	Steve Y. Chang	884.690US1	9612

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EXAMINER

PHAN, THANH S

ART UNIT PAPER NUMBER

2841

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/027,345

Applicant(s)

CHANG ET AL.

Examiner

Phan Thanh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8-10, 13-16, 18-24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins et al. [6,018,125].

Collins et al. disclose an electronic component [figure 2] mounted within a chassis [10] including a polymer electromagnetic interference (EMI) shield [14] comprising: a waveguide body including an array of circular waveguide cells [18] each having a contiguous inner surface; and an absorber layer [column 2, lines 60-61] covering at least a portion of each contiguous inner surfaces and capable of absorbing electromagnetic radiation over a select frequency range.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Mitchell [6,426,459].

Collins et al. disclose the instant claimed invention except for: each waveguide cells having a polygonal crosssection, and the shield being formed of a metallic material.

Mitchell discloses a waveguide shield [10] formed of metal having polygonal shape cells.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the shield design of Mitchell for the shield design of Collins et al. for the purpose of improving ventilation.

Claims 4, 6, 7, 17, 25-26 and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al.

Collins et al. disclose the instant claimed invention except for: the polygonal cross-sectional shape being rectangular, the specific absorber layer thickness and the specific resistivity of the absorber layer.

The specific shape of the waveguide, absorber layer thickness and resistivity would have been obvious design consideration based on the specific application intended for the device.

Regarding claims 25-26, to use screws to attach the shielding to the chassis would have been obvious in order to securely mount the shield thereto.

Regarding claims 28, applicant teaches that the use of epoxy with particles mixed therein would absorb radiation, specification, page 6, lines 1-6. To use the epoxy/particle material for the coating would have been obvious to control the radiation absorption.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Narang et al. [5,976,666].

Collins et al. disclose the instant claimed invention except for: the absorber layer including an epoxy resin filled with particles having a high magnetic loss over the select frequency range.

Narang et al. disclose an absorber layer for an EMI shield including an epoxy resin filled with particles having a high magnetic loss over the select frequency range [abstract].

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use magnetic particles in the absorber layer of Collins et al. for the purpose of controlling frequencies.

***Response to Arguments***

Applicant's arguments filed 07-15-03 have been fully considered but they are not persuasive. Applicant argues that the absorber layer of Collins et al. is conductive and thus would not have the absorbing properties claimed. Examiner disagrees. Collins et al. teach that the absorbing conductive metal layer of nickel over copper converts the wall into a conductive wall to prevent radiation through the wall, column 3, lines 3-18.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S Phan whose telephone number is 703-305-0069. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on 703-308-3121. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7721 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

tsp  
October 19, 2003

A handwritten signature in black ink, appearing to be 'D. Martin', written over a horizontal line.

**DAVID MARTIN**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER